



## A-11 300 B: Capital Asset Plan and Justification

### PROJECT TITLE: Corporate Human Resource Information System (CHRIS)

October 1998

#### PART I: SUMMARY OF SPENDING FOR PROJECT STAGES (In Millions)

The estimated funding requirements listed below for the initial Corporate Human Resource Information System (CHRIS) Project were projected to cover implementation of the PeopleSoft Human Resource Management System (HRMS) and Benefits modules. In Fiscal Year 1998, the DOE CHRIS project was expanded to include implementation of a fully integrated system to include PeopleSoft Payroll and Time and Labor. Funds to support the purchase of these additional modules have been identified from other DOE funding sources. A Personnel and Payroll Business Line has been established under the Department's Working Capital Fund to provide funding for system operation and maintenance once development is completed.

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	Total
<b>Investment</b>	\$1.4	\$1.3	\$1.1	\$1.8	\$1.8	\$1.8	\$9.2

#### PART II: JUSTIFICATION AND OTHER INFORMATION

##### DESCRIPTION

In 1994, the Department of Energy (DOE) conducted an analysis of alternatives to its in-house automated Payroll/Personnel System (PAY/PERS). PAY/PERS was nearing the end of its intended life and was not Year 2000 compliant. The human resources team, working as one of five separate functional teams analyzing technical and functional requirements for cross-servicing, developed business requirements and attended product demonstrations by the potential cross-servicing providers in 1995. Through this extensive study, it was apparent that none of the external service providers could meet the business and information management needs of the human resource professionals and program managers.

DOE's human resource community began exploring options that would meet their information needs and would be compatible with the goal of outsourcing payroll. A Technical Evaluation Team, meeting between December 1995 and March 1996, accomplished the following:

- < Adopted a set of comprehensive functional and technical requirements to be used in a potential procurement action.

- < Conducted a market survey of Human Resource system products currently being modified to handle regulatory and statutory Federal requirements and identified three vendors with possible candidate systems.
- < Recommended a configuration model for the Departmental Human Resource Management Information System to include estimated acquisition, deployment, implementation, and ongoing support costs.

Anticipating the need for a replacement to the PAY/PERS system, independent decisions were made in 1996 to outsource payroll operations and systems support to an external provider, the Department of Interior (DOI) Administrative Service Center (ASC), and to maintain human resources functions in-house utilizing commercial off-the shelf (COTS) software.

A Human Resources Strategic Information Management (SIM) planning process, following the framework established by the General Accounting Office (GAO), and published in the GAO document, "Executive Guide - Improving Mission Performance Through Strategic Information Management and Technology" (May 1994), was conducted under the aegis of the Department's Chief Information Officer (CIO). The SIM process conforms to planning requirements of the Information Technology Management Reform Act of 1996 and to the Information Management Section of the Department's Strategic Alignment Initiative. The HR SIM identified the information needed to support the human resource business processes, achieve efficiencies in operation, reduce paperwork, eliminate redundant information systems, eliminate non-value added work by human resource professionals, and provide the information needed by management to make sound, reasoned human resource decisions.

### **HR Analysis of Benefits and Costs**

The HR SIM also produced an Analysis of Benefits and Costs comparing the cost of continuing without a Corporate Human Resource Information System to the cost of acquiring and implementing such a system, over a six-year period. The analysis predicted a Return on Investment (Internal Rate of Return) of 52%, or a potential savings of more than \$9 million over a six-year life span. It is anticipated that this net savings will be achieved largely through the elimination of redundant systems, including cost avoidance of funding future maintenance and system upgrades and saved personnel time from reduced data entry and maintenance requirements. Additional savings will accrue by avoiding the high cost of modifying many of these systems to accommodate Year 2000 dates. The majority of these savings will occur in the outyears as additional human resource functionality is implemented in CHRIS and redundant systems are eliminated.

### **Selection of PeopleSoft for HR**

A workshop to develop software evaluation criteria was held in July 1996. The attendees adopted high-level attributes for software evaluation recommended by the Gartner Group, a firm of highly respected Information Management industry analysts. A formal evaluation process was conducted by a Department-wide evaluation team, resulting in a recommendation to acquire

PeopleSoft's Human Resources Management System (HRMS Federal), a commercial off-the-shelf software package. This software was purchased in September 1996.

PeopleSoft's HRMS Federal serves as the foundation of the existing Corporate Human Resource Information System (CHRIS). PeopleSoft's solution for the Federal Government addresses the entire federal enterprise with functionality designed specifically to meet Government requirements. PeopleSoft HRMS Federal includes support for the Request for Personnel Action (SF-52) processes, and such benefits programs as the Thrift Savings Plan (TSP), Federal Employees' Group Life Insurance (FEGLI), and Federal Employees' Health Benefits (FEHB). PeopleSoft HRMS, as purchased by the DOE, includes PeopleSoft Human Resources, Benefits Administration and Payroll Interface. Under the initial plan, personnel transactions processed through HRMS would have been submitted via an interface to the Department of Interior's Administrative Service Center, the originally selected provider for payroll outsourcing.

### **Re-evaluation of the Outsourcing Decision**

Under a January 1997 memorandum of understanding (MOU) which was later ratified by Interagency Agreement, the Department of Interior's Administrative Service Center (ASC) was to have provided processing services and operational support for the Department of Energy's payroll utilizing ASC's Federal Personnel and Payroll System (FPPS). The MOU also covered development of an interface to the DOE's Corporate Human Resource Information System being implemented using PeopleSoft HRMS. Special provisions in the MOU applicable to the interface included the:

- < Establishment of an interface design team made up of representatives from ASC, DOE, and other interested ASC customers.
- < Completion of an interface design concept by July 1, 1997, which would cover costs, feasibility, resource requirements, and schedule impact.
- < Intention of both the ASC and DOE to have the interface available by June 1998, the projected date for outsourcing implementation.
- < Right of either party to terminate the MOU if the design team determined that their interface requirements, particularly the project completion date, would not be met.
- < Cost avoidance by the Department of Energy of an estimated \$798,000 in FPPS system development costs should the MOU be terminated prior to October 1, 1997.

In the spring of 1997, based on less than desirable results and outcomes from several interface design meetings, DOE representatives raised serious concerns to management about the ability of the ASC to achieve both a timely and technologically acceptable interface solution. The Federal Energy Regulatory Commission (FERC), partnering with the Department on both CHRIS implementation and the design team, had already decided to re-evaluate payroll provider options. The Department joined FERC in this effort which took place over the summer of 1997, evaluating the National Finance Center, the General Services Administration, the Department of Veterans

Affairs, and Andersen Consulting as potential outsource providers. In addition, the study team evaluated the costs that would be associated with retaining payroll systems and operations support within the Department of Energy.

As a part of their study, the team also analyzed the Administrative Service Center's interface proposal which was received in July 1997. As proposed, the interface was found to be:

- < Not feasible since it required duplication of many functionalities both within and across both systems (CHRIS and FPPS) and would require extensive customization of CHRIS to successfully build and maintain the interface.
- < Not timely in that ASC could not begin work on the interface until January 1998, with proposed delivery of phase 1 in March 1999 and phase 2 in August 1999 (12-18 months after the date by which the complete interface would have been needed to assure adequate testing and refinement to meet the proposed July 1998 outsourcing implementation date).
- < Too costly, with development of both phases estimated to cost a total of \$3.5 million and projected annual maintenance of the interface estimated to cost \$450,000 to \$675,000.

Furthermore, despite providing definitive cost estimates, the DOI proposal indicated that it was entirely possible that the duration and costs could be at least an additional 50 percent higher since the full scope of the interface requirements were not yet understood. Also, not factored into the total interface costs were CHRIS customization and development of the PeopleSoft side of the interface since this could not be completed until the ASC proposal was in hand.

In August 1997, the joint DOE-FERC alternative payroll provider team presented its study findings to senior management. Based upon an estimated cost per employee for each potential service provider and an analysis of risk factors, the decision was made by the Department of Energy to:

- < Cancel the Interagency Agreement with the Department of Interior's Administrative Service Center for payroll systems and operations support.
- < Implement an integrated Human Resources, Benefits, Payroll, and Time and Labor system utilizing PeopleSoft commercial-off-the-shelf software.
- < Complete a best-and-final assessment of options for implementing this integrated system utilizing the best two options identified by the study--the Department of Veterans Affairs as an outsource provider or retaining payroll systems and operations in the Department utilizing internal Federal and contractor resources.

In October 1997, DOE staff presented the best and final assessment to the Assistant Secretary for Human Resources and Administration, the Chief Information Officer, and the Chief Financial Officer. This internal analysis of cost estimates indicated:

- < Startup costs would be \$1.2 million less using a DOE-based, in-house approach, with a primary difference being our share of the cost to support the new VA outsourcing center.
- < Annually, \$1 million would be saved on operating costs using an in-house approach, with a major difference being higher VA payroll technician costs.

In addition, a number of risks to selecting the Department of Veterans Affairs as an outsource provider were identified. VA was in the testing stages of its own PeopleSoft implementation and had not yet begun to use the system in an operational environment. They did not plan to implement their own PeopleSoft payroll application until late 1999, at the earliest. Based on the Department's time line for implementation, an arrangement with VA would have made DOE the test case for both VA's ability to implement PeopleSoft and to serve as a viable franchise organization. Additionally, the VA Shared Service Center, which would have provided payroll operations support, was not yet operational to permit an assessment of quality of operations services in comparison to the very high marks that the Department's payroll systems and operations staff received in an internal employee survey. As VA had no experience as a payroll franchise agency, pricing estimates for their services could not be verified against any real cost data. As a fee-for-service arrangement, this represented a considerable risk to the Department.

Based upon the projected cost estimates and risk factors, decisions were reached at the October 1997 meeting that included:

- < Develop an interim solution to include an interface from CHRIS to the PAYS-side of the current PAY/PERS system, establishing CHRIS as the official personnel system of record and eliminating PERS.
- < Make PAYS Year 2000 compliant to assure continuity of payroll systems and operations at the Department through this critical time period.
- < Assess the production readiness of PeopleSoft Federal Payroll and Time and Labor until such time as the software purchase seemed appropriate.
- < Continue the re-engineering and implementation of the human resource functionalities in the HRMS and Benefits modules under the phased approach initially planned.
- < Periodically reassess outsourcing options for implementation of an integrated PeopleSoft systems solution for human resources, benefits, payroll, and time and labor.
- < Expand the scope of the initial CHRIS Project to encompass the interim payroll solution to assure Year 2000 compliance and later the integrated systems solution to include PeopleSoft Federal Human Resources Management System (HRMS), Benefits, Payroll, and Time and Labor.
- < Consider the feasibility of providing personnel and payroll services to other Federal agencies.

In a study released in July 1998 by the General Accounting Office entitled, *Agencies' Initial Efforts to Restructure Personnel Operations*, the Departments of Interior, Health and Human Services, Veterans Affairs, and Agriculture (for the National Finance Center) were reviewed as current or potential providers of personnel and payroll services. The report provides several quotes related to risks which appear to support the Department's 1997 decisions:

- < *Without adequate information on the services being offered and their costs, the service quality, and their costs, an agency will have a difficult time making an informed decision on whether to purchase personnel and payroll services from another government agency.* (page 4)
- < *Among the issues that agencies may encounter if purchasing personnel and payroll services is the inability of service providers to deliver services when scheduled. Another issue is the lack of a common framework in which to (1) compare the service quality of personnel and payroll services that franchise and other federal agencies will provide to agencies seeking services and (2) permit the efficient exchange of automated personnel data between agencies and service providers.* (page 20)
- < *A common concern among the department and agency officials we interviewed was the lack of a common framework for restructuring personnel processes and information systems. These officials suggested that it would be useful to have, before entering into a cross-servicing arrangement, descriptions of the services agencies are offering. The descriptions could provide cost, performance, and other information about a service that would help an agency to decide whether to develop the service in-house or buy the service from another agency or the private sector.* (page 21)

### **Secretarial Initiative**

CHRIS is critical to the Secretary's business line goal for Corporate Management, *organizational excellence in corporate management systems and approaches.* It will provide a state-of-the-art solution to the human resources, benefits, payroll, and time and labor best business practices and business information needs of the Department's five business lines -- Energy Resources, National Security, Environmental Quality, Science and Technology, and Corporate Management. Expected outcomes include better support to business processes, efficiencies in operations, reduction in paperwork, elimination of redundant information systems and non-value added work, and provision of information needed by management to make sound, reasoned decisions. The Secretary's Performance Plan with the President includes an objective related to CHRIS implementation -- *Implement a DOE-wide employee accessible automated personnel system by December 1998.* This objective is cascaded into the Strategic Plan of the Office of Human Resources and Administration and performance objectives of HR senior management. In addition, CHRIS supports the Department-wide requirement to implement Year 2000 date change compliant mission-essential computer systems. With the Strategic Information Management process recently undertaken for the Business Management Information System (BMIS),

implementation of CHRIS will provide for interoperability and integration with this very key, mission critical system.

## **Project Management**

A managerial structure has been established to provide corporate oversight of the implementation process, make decisions concerning how CHRIS will be used throughout the Department, coordinate implementation at all sites, improve business practices to take maximum advantage of automated capabilities, and track project costs, savings, and tasks. The CHRIS structure is as follows:

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### ***Executive Committee on Information Management (ECIM)***

The existing Executive Committee on Information Management serves as the senior advisory board for the project. This Committee, chaired by the Deputy Secretary and comprised of senior program and staff officers of the Department, focuses managerial attention on the value of information, which needs to be managed as a corporate asset. The CIO serves as the Vice Chair to the Committee as it focuses on directing the use and sharing of corporate information. The Committee sets priorities to ensure the IM program is consistent with the Department's strategic vision and serves as the final arbitration point for any disputes not resolved at lower management levels. Through periodic reviews, they assure the Secretary that the Department's information management program and investments are being based on mission-oriented performance measures and that sound business practices, consistent with applicable laws and regulations, are being used.

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### ***Board of Directors***

The Deputy Chief Financial Officer, Chief Information Officer, and Deputy Assistant Secretary for Human Resources serve as the Board of Directors to the CHRIS Project Manager. They provide strategic vision and guidance, serve as chief advocates to Departmental senior management on project issues, provide functional leadership in their respective areas, and serve as stewards for project activities with field and Headquarters counterparts.

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### ***Project Manager***

A full-time Project Manager leads the effort, supported by a small permanent project staff. The Project Manager is responsible for project leadership, advocacy, communication, oversight, collaboration, evaluation and coordination of the overall project, project plan, budget, resource needs, and internal and external relationships. The Project Manager is equally accountable to all three Executive Directors for project accomplishments but reports administratively to only one of them.

< ***Advisory Committee***

The Advisory Committee (formerly the Steering Committee) serves as a corporate advisory body to the Project Manager representing the views and interests of stakeholders and customers for implementation and operation of CHRIS and is comprised of corporate-wide HR, CFO, and CIO representatives. Responsibilities of the Committee include providing both general oversight to the matrixed activities and serving as a check and balance point for the project's leadership. The CHRIS Project Manager serves as the Committee Chair and is delegated a high level of authority to manage the day-to-day aspects of the project.

< ***Team Leaders***

Three Team Leaders -- Human Resources and Benefits Administration Functional, Systems and Technical Support, and Payroll and Time and Labor Functional -- are responsible for team leadership, advocacy, communication, oversight, collaboration, execution, evaluation and coordination of task assignments, milestones, commitments, project plan, budget, staffing resource needs, internal and external relationships, re-engineering strategies, subject matter expertise, technology vision, and customer and stakeholder needs. Team Leaders may be devoted full-time to the project or be matrixed, carrying out project duties concurrently with normal day-to-day responsibilities.

< ***Team Members***

Staff resources to carry out the various tasks related to CHRIS implementation consist of a combination of Federal and contractor employees. Federal staff are provided within existing resources from the CFO, CIO, HR, specifically, and as needed by Program and Field Offices, either as dedicated full-time staff or matrixed part-time while carrying out regular day-to-day responsibilities. Team member responsibilities include execution, communication, prioritization, advocacy, collaboration, re-engineering, research, analysis, and integration of the tasks, subject matter and technical expertise, awareness of other areas, cross-cutting solutions, customer and stakeholder needs, processes, and benchmarks. The fluid nature of this structure will allow the project to expand, shrink, or redirect as necessary to support the project's implementation.

**Phased Implementation Strategy**

Implementation of CHRIS is being accomplished in a number of phases. Rollout of added functionalities are being prioritized annually based on customer and Departmental needs, readiness of the Federalized software for implementation, re-engineering priorities, and criticality of the processes.

Originally, Phase I, which began with the purchase of the software and was projected to be completed by March 1998, included implementation of personnel action processing. The scope of Phase I was purposefully narrow to permit adequate time for testing of the proposed interface to



the ASC's Federal Personnel and Payroll System. Phase I tasks included connecting all DOE Servicing Personnel Offices to the corporate system, populating human resource data tables in the new software (to include a massive data clean-up and conversion effort from the existing PAY/PERS system), training an appropriate number of new system users, assuring system security, and ensuring each site's ability to process personnel actions in the new system.

With the decision to cancel the payroll outsourcing agreement with the ASC, the scope of Phase I of the project was expanded to cover implementation of basic benefits, to assure that CHRIS can perform all mission-critical functions as the official personnel system of record, to develop an interface to PAYS, all by October 1998, and to achieve Year 2000 compliance for PAYS by March 1999.

### **Phase I Major Milestones and Accomplishments as of 10/2/98**

- 10/96 Established and institutionalized a matrix organizational approach to support the project implementation effort.
- 12/96 Installed the PeopleSoft HRMS Federal product onto a central server located at the DOE Federal Energy Technology Center in Morgantown, West Virginia, in less than 90 days after product purchase.
- 3/97 Completed initial data mapping and began processing personnel actions at the first DOE prototype site in CHRIS less than 120 days after the product's installation.
- 11/97 Designed and delivered an in-house user training program for system users at a fraction of the cost of vendor-provided training, with the design completed in less than 60 days and the training delivered to approximately 100 users in 120 days.
- 12/97 PeopleSoft HRMS application operating at all DOE Servicing Personnel Offices, with network connectivity to the corporate data base server. All DOE sites processing personnel actions in CHRIS, exceeding initial goal for this milestone by 120 days.
- 1/98 Changed server platforms to accommodate 3-tier architecture expected with PeopleSoft Release 7.0 and converted existing application to new platform.
- 3/98 Installed PeopleSoft Release 7.0 and began upgrade process.
- 5/98 Developed a project plan and design document for assuming all mission essential functions as official personnel system of record, implementing an interface from CHRIS (HR and benefits) to PAYS (payroll), and assuring Year 2000 compliance for personnel data.

- 7/98 Completed initial required software modifications and development and upgrade process to PeopleSoft Release 7.0; issued CHRIS Users Manual reflecting changes in work processes from Release 5.2 to Release 7.0; implemented personnel action processing in CHRIS 7.0 across the DOE complex.
- 9/98 Completed required development and/or modifications to Release 7.0 and CHRIS/PAYS interface; completed CHRIS to PAYS interface testing; conducted successful systems integration and parallel tests; developed and issued revised CHRIS Users Manual to reflect additional changes in work processes; implemented basic benefits functionality and established CHRIS as the official system of record for personnel information effective with the pay period beginning 9/27/98 with the first paycheck to be generated as a result of the CHRIS/PAYS interface on 10/22/98.
- 10/98 Shut down the PERS portion of the Department's legacy PAY/PERS system.

### **Re-engineering Strategy**

A Just-in-time re-engineering strategy has been adopted for CHRIS implementation to assure that our energies are focused on the right processes at the right time. The PeopleSoft functionality is extremely robust, supporting some thirty different human resource programs; however, Federalization of their commercial product is occurring over time dependent on the expressed needs, desires, and priorities of Federal customers. Throughout the CHRIS implementation, DOE will realign and re-engineer business processes and streamline operations to effect improvement opportunities identified in the HR SIM and based on examination of best business practices inherent in the PeopleSoft Federal HRMS, Benefits, Payroll, and Time and Labor software. It is the intent of the Project to continue the phased approach to establishing re-engineering priorities on a yearly basis and implementing additional system functionality through Fiscal Year 2004 and continuing over the life of the Project.

On at least an annual basis, an assessment will be conducted to:

- < Determine the status of on-going re-engineering and implementation activities.
- < Assure the readiness and availability of project functional and technical resources based on the status of the current project phase to take on added support requirements.
- < Determine the state of production readiness of the PeopleSoft Federal functionalities.
- < Benchmark current business practices against the PeopleSoft Federal functionality as to the potential level of impact on current DOE policy and practices.

- < Gather information from stakeholders and customers on their priorities for added software functionality to more efficiently conduct their business.

Based on this assessment, a report will be provided to the CHRIS Advisory Committee with recommendations on re-engineering priorities to be established for the next phase. The Committee's advisory opinion on these priorities will then be provided to stakeholders and customers for consideration and a consensus decision. Final recommendations will be reviewed and approved by the Board of Directors.

Once re-engineering priorities have been approved for a particular phase, a volunteer re-engineering champion will be identified for each functionality to establish and lead a matrix re-engineering team to document the current process, identify opportunities for improvement, and report those opportunities to the CHRIS project. As appropriate, a member of the Human Resources/Benefits or Payroll Functional Teams will serve as liaison to the re-engineering team to ensure consistency in approach and to provide subject matter and/or technical expertise on the software. The following steps will be used to document and analyze existing processes:

- < Define Current "As Is" Processes - Specific information will be obtained from stakeholders and customers regarding the existing process. Results will be compiled and analyzed for similarities, as well as differences. Team members will evaluate process issues and problems as a group.
- < Identify Issues - Issues that have potential impact on customer satisfaction, process efficiency, or flexibilities will be identified and recorded to ensure they are resolved in the re-engineered process.
- < Design and Implementation of Re-engineered Processes - Recommendations for design of re-engineered processes will take into account information generated from the previous steps and documentation will address both system and process changes needed to accommodate the business needs of the Department of Energy. Process flow charts and step-by-step procedures will be prepared to support implementation of re-engineered processes following appropriate buy-in from stakeholders and customers. Any policy changes required to support re-engineered business practices will be coordinated as appropriate with those individuals responsible for the development and approval of Departmental policy. If customization to the software is required, changes will be staffed and approved following CHRIS customization control procedures.

The following roles and responsibilities have been established for CHRIS re-engineering efforts:

- < The Re-engineering Champion and CHRIS Functional Team Leader will work together to:
  - Establish and lead a corporate process re-engineering team

- Guide team efforts
  - Ensure involvement and input is obtained from all CHRIS stakeholders/customers
  - Identify and obtain necessary resources
  - Analyze team member recommendations
  - Communicate progress of re-engineering efforts to the CHRIS Project Manager
  - Ensure appropriate buy-in to business process re-engineering efforts across the complex
  - Ensure that re-engineered business processes appropriately meet the needs of CHRIS stakeholders/customers
- < The CHRIS Liaison will:
- Serve as a key member of process re-engineering team
  - Set the tone for deliverables
  - Facilitate re-engineering efforts
  - Provide subject matter and/or technical expertise on the software
  - Track progress of re-engineering efforts
  - Test the re-engineered process against the CHRIS scope
  - Communicate progress of re-engineering efforts to the CHRIS Functional Team Leader
- < Re-engineering Team Members will:
- Carry out project tasks under the leadership of the Champion and Functional Team Leader
  - Communicate with each other to ensure re-engineering efforts are on target
  - Analyze root causes of problems as they arise
  - Search for alternative solutions to problems
  - Analyze alternative solutions for the best fit
  - Recommend viable re-engineering strategies to the Champion and Functional Team Leader
- < Stakeholders/Customers will ensure:
- Accurate information is provided to aid in re-engineering efforts
  - Staff and budget are available to support corporate re-engineering efforts

## **Phase II Re-engineering Priorities**

Phase II re-engineering priorities were recommended by the Steering Committee and agreed to by the human resource community in June 1997, prior to the decision to expand the CHRIS project to include implementation of PeopleSoft Federal Payroll and Time and Labor. Priority HR re-engineering areas for Phase II include:

- < An extensive analysis of core information needs and requirements for the DOE training community to support adoption of CHRIS as the corporate system of record for **training administration** activities. It is anticipated that this effort will eventually lead to the elimination of some five major training systems which are currently in use across the DOE complex.
- < An extensive analysis of DOE **position management** needs and practices to take maximum advantage of the way positions and position descriptions are managed in the commercial off-the-shelf software. It is anticipated that this effort will result in fundamental changes to DOE classification practices through use of generic position descriptions (PD libraries) and changes to PD and position numbering guidelines.
- < Research and development activities to support **web-enabled solutions** for providing DOE managers and employees with access to CHRIS. It is anticipated that this research and the resulting capability will also lay an important foundation for **paperless** processes in the Department and will serve as an important precursor to many other important re-engineering efforts.

Phase II priorities were established for implementation in the 7.0 release of PeopleSoft Federal HRMS. At the time these decisions were made, 7.0 was expected to be made available in February 1998. Phase I was expected to be completed in March 1998, and the upgrade process from release 5.2 to 7.0 was expected to be completed by May 1998. Process re-engineering was scheduled for the third and fourth quarters of Fiscal Year 1998 and first quarter of Fiscal Year 1999, with added functionality implemented on a phased approach throughout the remainder of Fiscal Year 1999.

With the August 1997 decision to cancel the payroll outsourcing agreement with the Administrative Service Center and the new requirements placed on the Project as a result of that decision, all CHRIS funding and dedicated, matrixed, and contractor resources have been devoted to completing the numerous tasks related to achieving the CHRIS to PAYS interface by October 1998. Research on Phase II identified re-engineering priorities began in the last quarter of Fiscal Year 1998, but for the most part will be delayed to the first quarter of Fiscal Year 1999.

## **IMPLEMENTATION SCHEDULE**

### **Implementation Schedule for Fiscal Year 1999**

In May 1998, the CHRIS Project initiated a planning process to develop a project plan and work breakdown structure to support the project's expansion to include implementation of PeopleSoft Federal Payroll and Time and Labor. This planning effort is based on the following assumptions:

- < CHRIS implementation remains a high organizational objective for the CFO, CIO, and HR.
- < Adequate Federal Project management, leadership, and team resources will be designated and continually funded by HR, CFO, and CIO.
- < Dedicated Project staff (Federal and contractor) will provide corporate memory, continuity, and a high level of functional and technical skills, abilities, and knowledge.
- < Federal and contractor resources are available, accessible, and planned.
- < Adequate funding will continue from the CIO Corporate Management Information Program and the Working Capital Fund.
- < Stakeholders/customers embrace and support business process re-engineering by providing matrix resources for this activity and accept new business processes when implemented.
- < Appropriate Departmental policies will be developed, reviewed, and/or revised to support re-engineered business processes.
- < CIO assures complex-wide infrastructure to support corporate systems.
- < Program and Field Offices meet minimum hardware and software requirements for PeopleSoft implementation.
- < The Department will implement an integrated system solution to include PeopleSoft Federal HRMS, Benefits, Payroll, and Time and Labor, establishing CHRIS as the Department's official system of record for these functions.
- < PeopleSoft Federal will meet release schedules and the software is production ready when delivered.
- < Internal and external influences will not have a significant negative impact on the Project (e.g., budget, reduction-in-force, union negotiations, major Departmental mission/function transfer).
- < Personnel and payroll operations will continue without interruption while functional and technical development and implementation of the integrated systems solution is on-going.

At this time, many unknowns exist relative to the above assumptions and how they may affect the time line to be established for the project work breakdown structure. However, a time line is

being proposed based on the current knowledge at hand, particularly as it relates to the production readiness of the PeopleSoft Federal products.

## **Phase II Major Milestones (Fiscal Year 1999)**

- 11/98 Generate the first Central Personnel Data File report for the Office of Personnel Management from CHRIS as official personnel system of record
- 12/98 Stabilize the CHRIS production environment, completing any development and modifications determined necessary to assure a high level of data integrity
- 12/98 Establish matrixed Payroll and Time and Labor implementation team and begin PeopleSoft training
- 12/98 Provide Employee Self-Service capability to DOE employees across the complex to view appropriate personnel and payroll information
- 12/98 Finalize recommendations on reengineering position management/classification processes
- 1/99 Install and configure servers at Headquarters to provide off-site back up and recovery for CHRIS (servers also to be used for Payroll and Time and Labor software development)
- 1/99 Successfully mass produce personnel actions to implement the 1999 annual cost of living increase
- 3/99 Complete review of initial recommendations of the position management reengineering task group and develop project plan for implementation of accepted recommendations
- 4/99 Complete requirements for Y2K compliancy of PAYS to ensure no interruption in pay check processing until PeopleSoft integrated suite can be fully implemented
- 5/99 Conduct prototype (fit/gap) analysis and testing of training administration functionality
- 5/99 Install PeopleSoft 7.5 Release of Payroll and Time and Labor and begin initial functional analysis
- 6/99 Install PeopleSoft 7.5 Release of HRMS and Benefits with upgrade path (for customers in production) and begin analysis to determine projected time line for completion of upgrade

- 7/99 Complete analysis to expand Employee Self-Service web application to include employee capability to update certain personal information and develop implementation plan
- 7/99 Establish Phase III (Fiscal Year 2000) reengineering priorities
- 9/99 Implement CHRIS as the official system of record for training administration across the Department complex
- 9/99 Establish project plan and work breakdown structure for Fiscal Year 2000 for HRMS, Benefits, Payroll, and Time and Labor

The above major milestones are firm through April 1999. The remaining milestones are dependent on the actual date of that PeopleSoft makes the 7.5 release available to new (Payroll and Time and Labor) and production (HRMS and Benefits) customers. Currently, Release 7.5 is expected to be available to new customers in the March/April 1999 time frame, with the upgrade manager available two months following the initial release.

### **Major Milestones Beyond Fiscal Year 1999**

As noted previously, the project will be implemented in a phased approach, with a reengineering agenda, implementation project plan, and work breakdown structure developed annually. The project schedule is dependent on the PeopleSoft release schedule and the availability of adequate Federal functionality as the vendor continues to Federalize its commercial products. Once we have a fully installed base of the four products being implemented -- HRMS, Benefits, Payroll, and Time and Labor -- it will be crucial to keep current with the PeopleSoft Release schedule. Based on tentative PeopleSoft release time lines, the earliest assumed implementation of Payroll and Time and Labor in full production will be in Fiscal Year 2001. Within the work breakdown structure, a definitive requirement will be established to assure appropriate semi-annual review of this documentation so that schedules and activities will be amended timely and as appropriate.

### **BENEFITS OF CHRIS TO THE ORGANIZATION:**

The following benefits of full CHRIS implementation to the Department of Energy have been identified:

- < Provide direct access to human resource information to DOE managers and employees. Increases ownership of the human resource process (recruitment, position descriptions, promotions, evaluations, development, status changes, benefits, beneficiaries, payroll deductions, etc.).



- < Maintains human resource information in a centralized location and eliminates redundant data entry efforts, thus increasing reliability and data integrity and provides better access to information.
- < Enables a corporate approach to re-engineering human resource processes to take maximum advantage of best business practices inherent in the commercial off-the-shelf software. Is a catalyst for changes in business policy and practice as additional system functionality is introduced.
- < Provides decision support capabilities by allowing managers to perform "what-if" analyses to determine the impact on budget and mission of proposed changes in staffing levels and organizational structure.
- < Reduces turnaround time in completing personnel, benefits, and payroll transactions, enabling human resource professionals to provide top quality customer service while the Department's core administrative staffs continue extensive downsizing.
- < Meets tracking and reporting requirements of the Defense Nuclear Facilities Safety Board (DNFSB), such as the Certification of Facility Representatives.
- < Complies with the Department's Information Architecture and with Year 2000 date requirements; provides functionality beyond personnel processing, supporting training, accident and Workers' Compensation reporting, personal property tracking, benefits, etc.
- < Allows for the creation of a data base of potential applicants for DOE positions and for the matching of applicant skills with position requirements. This will assist DOE in meeting workforce diversity and Welfare-to-Work goals.
- < Facilitates a paperless working environment for many of the core human resource and administrative systems and processes.
- < Provides a uniform, centralized reporting and trending information environment.

#### **BENEFITS OF CHRIS TO MANAGERS AND EMPLOYEES:**

Full implementation of CHRIS will allow DOE managers and supervisors to:

- < Access personnel information on their employees and organizations from the desktop.
- < Perform "what-if" analyses to determine impact of proposed human resource changes on budget, organizational structure, etc.
- < Initiate and submit Requests for Personnel Action electronically via a paperless, automated work flow.

- < Search the data base for skills, education, experience, etc.

Implementation of CHRIS will empower DOE employees by providing:

- < The capability to access or change a variety of human resource-related personal information from the desktop (i.e., home address, payroll deductions, benefits changes, education information, etc.) thereby further reducing the burden on human resource staff that originally processed these actions.
- < A paperless process for completing certain forms and processes.

#### **CHRIS SAVES DOLLARS BY:**

- < Eliminating support staff costs for redundant automated systems.
- < Eliminating redundant data entry into multiple systems.
- < Integrating functionality that currently exists in multiple standalone systems.
- < Avoiding 'Year 2000' transition problems and costs.
- < Reducing paperwork by the use of automated work flow and web-enabled capabilities.
- < Eliminating 'non-value-added' work by human resource professionals.

#### **INVESTMENT/SAVINGS/RETURN: (In Millions)**

The figures below represent the investment, savings, and estimated projected return that resulted from the HR Strategic Information Management process. As noted earlier in this document, based on the 1997 assessment of payroll outsourcing options, an expected savings of \$1M per year will be recognized by implementing the integrated system solution utilizing PeopleSoft Federal Payroll and Time and Labor using in-house Federal and contractor resources.

	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	Totals
<b>Investment</b>	2	1.4	1.3	1.1	1.8	7.6
<b>Savings</b>	3	4.5	6.2	6.2	6.5	26.4
<b>Return ( by FY)</b>	1	3.1	4.9	5.1	4.7	18.8

#### **OMB INVESTMENT CRITERIA**

**Investments in major information systems proposed for funding in the President's budget should:**

## **1. Support core/priority mission functions that need to be performed by the Federal Government**

It is envisioned that implementation of CHRIS will enable DOE to reduce multiple levels of administrative staffs and provide much needed tools to support already downsized human resources and payroll staff. In addition, CHRIS will provide the flexibility to meet the Department's core and priority mission functions in today's rapidly changing environment by driving decentralized authorities, changed policies, and agency-wide changes to business processes. CHRIS will provide a fully integrated information system rather than just an information processing system.

## **2. Be undertaken by the requesting agency because no alternative private sector or governmental source can efficiently support the function**

Through the Department's extensive study of personnel services provided by other agencies, the human resource community concluded that none of the available services would meet the needs of the human resource professionals and program managers for an information technology solution. Two studies, one which began in 1995 and a second in 1997, evaluated potential payroll outsourcing providers as an alternative to developing a replacement payroll and time and attendance system. While the Department initially decided to outsource payroll to the Department of Interior, and entered into an interagency agreement for these services, a decision was made in 1997 to cancel that agreement because an interface to the new human resource information system was neither cost effective nor timely. Based on the 1997 payroll provider study, entering a new provider agreement with the Department of Veterans Affairs represented a considerable risk to the Department. A subsequent report issued in July 1998 by the General Accounting Office provide several quotes related to the risks identified by the Department which appear to support our decision to keep payroll in-house. Furthermore, a vanilla implementation strategy of a commercial off-the-shelf product ensures a sound investment in technology for the Department.

## **3. Support work processes that have been simplified or otherwise redesigned to reduce costs, improve effectiveness, and make maximum use of commercial, off-the-shelf technology**

The Human Resource Strategic Information Management planning process identified opportunities for improving personnel processes, including elimination of work that adds no value to the process. The CHRIS Project staff is analyzing opportunities to determine how the Department's human resource and payroll practices can best be improved and how these improvements can be implemented within DOE using PeopleSoft's Federal technology. Tasks required to implement system and process changes to support CHRIS will be planned and scheduled as part of the overall implementation schedule.

## **4. Demonstrate a projected return on the investment that is clearly equal to or better than alternative uses of available public resources. Return may include: improved mission**

**performance in accordance with GPRA measures; reduced cost; increased quality, speed or flexibility; and increased customer and employee satisfaction. Return should be adjusted for such risk factors as the project's technical complexity, the agency's management capacity, the likelihood of cost overruns, and the consequences of under-or non performance**

The CHRIS Analysis of Benefits and Costs predicted a positive return on investment of 52% over six years. Cost savings will accrue largely through the elimination of redundant systems and duplicated data across the Department. Some 80+ corporate and locally-maintained applications have been inventoried by the CHRIS project. System owners and users have been interviewed to assess information requirements and to plan for system replacement. Significant return on the capital investment will be realized over the next 2-3 years as these systems are prudently eliminated.

In addition, CHRIS will also allow DOE's human resource and payroll professionals to provide improved service to customers in a time of severely reduced resources. Improved turnaround in processing personnel actions and payroll and requests for information, improved data accuracy and the flexibility to meet future changes are anticipated with CHRIS implementation. Because CHRIS is based on a market-leading, commercial-off-the-shelf software product, project risk is considered minimal. PeopleSoft's Federal products are based on its private sector version, which has claimed a large share of the human resource software market.

**5. Be consistent with Federal, agency, and bureau information architectures which : integrate agency work processes and information flows with technology to achieve the agency's strategic goals; reflect the agency's technology vision and year 2000 compliance plan; and specify standards that enable information exchange and resource sharing, while retaining flexibility in the choice of suppliers and in the design of local work processes**

DOE's Information Architecture Team reviewed the CHRIS project and concluded that CHRIS implementation maps closely to seven of the eight architectural principles defined by the Department and is aligned with the published volumes of the Departmental Information Architecture. PeopleSoft's Federal products are compliant with Year 2000 date requirements, are certified for operation on several platform configurations and have numerous business partners offering products that operate in conjunction with the application.

**6. Reduce risk by: avoiding or isolating custom-designed components to minimize the potential adverse consequences on the overall project; using fully tested pilots, simulations, or prototype implementation before going to production; establishing clear measures and accountability for project progress; and, securing substantial involvement and buy-in throughout the project from the program officials who will use the system**

DOE's goal is to implement CHRIS with as little customization as possible. Because the PeopleSoft Federal product is not yet fully compliant with Federal regulation and statute, a number of modifications have been made to achieve this compliance. CHRIS Project staff have worked closely with PeopleSoft development to insure that specific CHRIS modifications are

shared and eventually embedded in the delivered product. As patches are provided from PeopleSoft to add these enhancements, once the patches are fully tested DOE modifications are removed from our application and the patches applied. The Department is also working closely with other Federal agencies who are implementing PeopleSoft Federal products to share modifications in order to reduce overall development costs and further enhance the product for multi-agency use. The product remains virtually 99% ~~Avanilla,~~ in terms of modifications to meet ~~Adesired~~ as opposed to required functionality. A Project Plan and Master Schedule were developed to guide the Phase I implementation efforts, track tasks by responsible person(s) and by target date, and report project status and progress to management. A Project Plan and Master Schedule for Phase II is under development.

DOE's human resource community has been fully committed to CHRIS since the Human Resource Information System task force and the Human Resource Strategic Information Management (SIM) planning process. In addition, CHRIS has been endorsed by DOE HR Directors as their number one priority for the last two fiscal years. The Chief Financial Officer organization in the last year has joined with the Chief Information Officer and the Office of Human Resources and Administration in the leadership of this key Department initiative.

**7. Be implemented in phased, successive chunks as narrow in scope and brief in duration as practicable, each of which solves a specific part of an overall mission problem and delivers a measurable net benefit independent of future chunks**

Implementation of CHRIS has been accomplished following a phased strategy during CY 1997. A Phase I goal of connecting all sites to the CHRIS central server and ensuring each site's ability to process personnel actions in the new system was established. Within that phased goal, more specific phased goals were established such as the use of six initial prototype sites for site conversion. Lessons learned feedback was both documented and shared across the complex. The initial Phase I goals were broadened during 1997 to include establishing CHRIS as the official personnel system of record and to implement an interface to PAYS. Phase II re-engineering priorities have been identified as training, position management, and web-enabled technologies and PAYS will be made Year 2000 compliant. Within Phase II, independent net benefits will be realized through re-engineering and implementation of each of the major priority areas.

**8. Employ an acquisition strategy that appropriately allocates risk between Government and contractor, effectively uses competition, ties contract payments to accomplishments, and takes maximum advantage of commercial technology.**

CHRIS implementation was initially undertaken primarily by the Department's human resource and information management communities, with minimal assistance from support services contractors. With the decision to cancel the outsourcing of payroll, a PeopleSoft integrator contractor with extensive PeopleSoft knowledge was brought on to assist because of the broadened scope of the project. To decrease the prospect of long-term reliance on this contractor, Federal and local contractor staff have worked side-by-side to assure knowledge transfer. The evaluation and selection of a vendor for CHRIS involved in-depth analyses of the Department's needs, product demonstrations, interviews with customers of three top vendor

candidates, review of responses to a Departmental questionnaire, further discussions with the three potential vendors, and a formal rating and ranking of vendors by the CHRIS evaluation team. The selected product, PeopleSoft Federal, is a commercial-off-the-shelf software application used extensively in the private sector that has been modified by PeopleSoft to meet requirements of the Federal Government.

## PART III. COST, SCHEDULE, AND PERFORMANCE GOALS

### A. Description of performance-based system:

This project utilizes the standard earned value system. The reporting threshold for cost and schedule variances will be 15% for this project.

### B. Previous baseline goals:

There are no previous baseline goals.

### C. Baseline Goals:

#### 1. Cost and schedule goals (in millions).

FY99	FY00	FY01	FY02	FY03	FY04	TOTAL
1.4	1.3	1.1	1.8	1.8	1.8	9.2

These projected costs only include implementation of PeopleSoft Federal HRMS and Benefits. The cost includes the initial acquisition of these PeopleSoft products, which was completed in September, 1996. Milestones for FY 98 include the processing of all personnel actions in both CHRIS and the existing PAY/PERS system Department-wide. All DOE sites were processing actions in version 7.0 PeopleSoft by July of 1998, with an interface to PAYS to be completed by the end of the Fiscal Year. Other milestones are the identification of an integrated payroll solution and the establishment of CHRIS as the official system of record for personnel transactions by October 1998. Re-engineering efforts to support Phase II implementation of the project began in late FY 98, but for the most part will be carried out in the first quarter of FY 99. Other FY 99 milestones include phasing out old PAY/PERS functions which are being replaced by CHRIS, implementing training administration and employee desktop access to information, and potentially beginning the implementation of the payroll and time and labor modules of the PeopleSoft product, depending on the PeopleSoft schedule for release 7.5 of this product. In FYs 00/01, the project will implement payroll and time and labor as well as continue the phased implementation of human resource product functionality and keep current with future product releases, including enhanced Federal functionality and improved technologies.

#### 2. Performance goals.

CHRIS will replace the existing PAY/PERS system, which is nearing the end of its life cycle, as well as the more than 80 redundant or outdated HR information systems which have been identified throughout DOE, thus beginning to realize our 52% ROI. CHRIS will also provide a standardized platform with instant access to human resource and payroll data through the use of web-based technologies, enabling the HR community to respond much more effectively and efficiently to the needs of DOE managers and employees and, in addition, will provide

more timely and accurate personnel information for decision-making purposes. Finally, conversion to the CHRIS system will resolve any Year 2000 problems that currently exist with PAY/PERS and other independently-maintained applications.

**D. Current estimate:**

1. Cost and schedule goals. The current estimate for this project is the baseline identified in C.1.
2. Performance goals. Current estimates of the performance goals of this project are the same as those identified in C.2.

**E. Variance from baseline goals:**

There are no current variances from baseline goals.

**F. Corrective actions:**

No corrective actions have had to be taken, although expectations for the Federal production readiness of

**G. Proposed revisions to baseline goals:**

There are no proposed revisions to the baseline goal at this time.



